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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/651,170	08/30/2000	Robert Eric Montgomery	12080-4	2711	
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Please find below and/or attached an Office communication concerning this application or proceeding.

## Application No. MONTGOMORY D. Office Action Summary Examiner Group Art Unit -The MAILING DATE f this communication appears n the cover sheet beneath the correspondence address-P riod for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for repty is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). **Status** het 8 MAR 7 April 22002 Responsive to communication(s) filed on A This action is FINAL. ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 453 O.G. 213. Disp siti n of Claims is/are pending in the application. ∠ Claim(s) \_\_\_\_ \_ is/are withdrawn from consideration. Of the above claim(s)is/are allowed. ☐ Claim(s)\_ Claim(s) \_ \_\_\_\_ is/are rejected. ☐ Claim(s)-\_ is/are objected to. . are subject to restriction or election ☐ Claim(s)requirement. **Application Papers** ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. \_\_\_\_is 🗆 approved 🗆 disapproved. ☐ The proposed drawing correction, filed on\_ □ The drawing(s) filed on\_\_\_\_ \_\_ is/are objected to by the Examiner. ☐ The specification is objected to by the Examiner. ☐ The oath or declaration is objected to by the Examiner. Pri rity under 35 U.S.C. § 119 (a)-(d) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d). ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been ☐ received. ☐ received in Application No. (Series Code/Serial Number) □ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)). \*Certified copies not received:\_

Office Acti n Summary

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97).

☑(Information Disclosure Stat m nt(s), PTO-1449, Paper No(s). —

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☑ Notice of Reference(s) Cited, PTO-892

Attachment(s)

Part of Paper No.\_\_\_\_\_

\_\_\_\_ Interview Summary, PTO-413

☐ Other · · · ·

☐ Notice of Informal Patent Application, PTO-152

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3, 4, 5, 7 to 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of: Lutz et al, Murayama (I-II), Pellico, Kibbel et al Peterson, and Montgomery (I-II), (details below) each taken by itself, (for "Carbopol" gels of peroxide) or in further view of Mehaffey, who describes and establishes proof of the <u>transparent</u> nature of "Carbopol" (Carboxpolymethylene gels), (and who includes the <u>benzophenone</u> photoactivating component, as <u>u/v light a border</u>).

The statement of intended use in the preamble of these composition claims has been amended to recite "<u>for use in-light-activated tooth whitening</u>"; these composition claims state in their preamble their intended use for "tooth whitening".

The <u>intended use of an old composition</u> does not render composition claims patentable. <u>In re Zierden</u>, 162 USPQ 102, 104, and the <u>mere preamble statement of a</u>

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new use for on otherwise old, or obvious, composition, cannot render a claim to the composition patentable, In re Sinex, 135 USPQ 302-305.

Claims 2, 10 to 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over anyone of Lutz et al., Kibbel et al or Peterson, (each describing visious carboxypolymethylene (carbopol) thickened hydrogen peroxide laundry bleach), taken with Mehaffey, (who describes their <u>inherently transparent nature</u>) (who includes the <u>benzophenone photoactivators</u> therewith) and anyone of each of Hermont et al., Heffner et al (I-II), and Speakman, and Unilever (I) (who describe, for bleach, the balance of the photoactiviting members of the Markush group of claim 13, namely:

Encompassed species of photo activity components recited in claim 13 are described with encompasses species of oxidizing peroxides, peroxyacids, and/or peroxyacid precursors in the analogous stain removing bleaching art, as see:

Hermont et al (<u>metal-ligand complex catalysts</u> for activating oxidative bleaching and stain removal by <u>hydrogen peroxide</u> or by <u>peroxy acids</u>);

Heffner et al (I-II (<u>diketone</u> activation of <u>peroxygen</u> bleaching and stain removed in <u>dental</u> cleaners with potassium <u>monoperoxysulfate</u>);

Speakman, (phthalocyanine-zinc metal complex as photo activator for sodium perborate stain removal, when irradiated with visible daylight);

Unilever (I) (benzotriazole in peroxy acid bleaching gel;

These motivate their inclusion into the viscous carboxypolymethylene ("Carbopol") gelled peroxide bleach of Lutz et al, Kibbel et al or Peterson.

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The statement of intended use in the preamble of these compositions does not render these obvious compositions patentable. IN re Sinex, 135 USPQ 302, 305.

This application, Serial No. 09/651,170 was filed by R.E. Montgomery and S.A. Nathoo on August 30, 2000 and claims the benefit of a <u>February 19, 1998</u> priority date. It contains fourteen composition claims drawn to:

- (A) a <u>transparent</u> carrier compound, not necessarily a <u>gel of</u> <u>carboxypolymethylene</u> as recited in claim 3, containing.
- (B) an <u>oxidizing compound</u>, not necessarily a <u>peroxide</u> or <u>peroxy acid</u>, as recited in claim 4, and not necessarily a peroxide member of the <u>Markush group of claim 5</u>, namely: hydrogen peroxide, carbamide peroxide, alkali metal peroxide, alkali metal percarbonate, and alkali metal perforate.

The February 8, 2002 response to the August 8, 2001 office Action amends the preamble statement of intended use in claim 1 to read "a tooth whitening composition for use in light – activated tooth whitening" and elects, with traverse, hydrogen peroxide as oxidizing compound and a gel comprising carboxypolymethylene, corresponding to claims 1, 3, 4, 5, 7 to 9,) and "metal ligand complexes" of the Markush group of claim 13 of six "photoactivating components" (corresponding to the third photoactivating agent component of claims 2, 10 to 13).

Claims 6 and 14 are withdrawn, Rule 142(B), as non-elected subject matter.

This application is a <u>divisional</u> application of Serial No. 09/234,038, filed January 19, 1999, <u>now U.S. Patent No. 6,162,055</u> according to a request for a corrected filing

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receipt filed Dec. 27, 2000, and <u>accordingly</u>, the obviousness-type double patenting ground of rejection on U.S. 6,162,055 is hereby withdrawn, <u>35 U.S.C 121</u>.

The remarks of applicants' counsel traversing the rejections of these elected composition claims on the cited prior art references compositions of the <u>same</u> (A) carries and (B) oxidizing peroxides, state that:

"....The Examiner has not pointed to" any evidence " in the cited references, relating the subject matter of those references to <u>transparent</u> tooth whitening compositions <u>for use with light-activated tooth whitening</u>..."

"...It is submitted that prior art disclosures including both carboxypolymethylene and peroxides or peroxides are not <u>ipso facto</u> anticipations, unless described as <u>transparent and for use with light-activated tooth whitening</u>..."

"...It is further acqued by counsel, that both of these <u>underlined statements</u> must be found (or teach suggest or motivate) in <u>cited portions</u> of the asserted references, and that <u>the Examiner has</u> a <u>burden to establish a prima facie case of anticipation or obviousness...."</u>

Applicant's counsel making these remarks, is not presumed to have the knowledge of an expert, or of the applicants themselves, or everyone knowledgeable with the inherently highly transparent "clear gel" nature of Carbopol T.M. carboxypolymethylene gels, and there is no Rule 132 Opinion of an expet, to buttiess the remarks, denying or refuting the technical, fact that applicants herein never stated that it was their discovery herein that Carbopol (Carboxypolymethylene) gels are transparent, or that they have been used in the prior art, prior to the February 19, 1998

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priority data herein, to form common Knowledge in the art). So, any composition of carboxylmethylene gel and peroxide meets and anticipates, claims 1, 3, 4, 5, 7 to 9, whether or not the reference states an intended use "for use in – light-activated tooth whitening" and whether or not the reference states an intended use as a "tooth whitening composition". It could be <u>laundry or hair bleach</u>, or <u>topical antiseptic</u>, etc.

A review of the prior art submitted by applicants on their IDS includes:

Lutz et al U.S. 4,130,501 (12/78), describing (column 1, lines 1 to 3) 13% to 30% hydrogen peroxide laundry bleach, hair bleach, antiseptic thickened in Carbopol carriers (column 2, lines 1 to 35) described as "clear" (Example 2, col. 4, line 67) tables 2, column 6, 7, 8 having "clarity" (column 4, lines 20-21), ultramarine blue pigment (Example 7) and blue dye (Example 8) are added.

Murayama (I-II), See: U.S. 5,401,495 (3/95) describes a prior art <u>Carbopol</u> 934 6% hydrogen peroxide (tooth whitening) bleaching gel as a <u>clear homogenous stable</u> <u>visious gel</u> (column 5, lines 1 to 49, Example 2, column 8, lines 31 to 52, , Example 4, column 9, lines 30 to 34, claims 6 to 11.

Pellico U.S. 5,718,886 (2/98) claims anhydrous and describes <u>aqueous</u> (column 1, lines 40 to 68 carboxypolymethylene gel (Carbornal) peroxide tooth whitening bleaching gels, but is <u>silent</u> as to whether or not they are <u>transparent</u>, (inherently, <u>they are</u>).

Mehaffey, U.S. 3,0119,50 (12/61) describes (Carbopol, carboxypolymethylene) (column 5, 6, claims 6, 11, 18) <u>carboxyvinyl polymer</u>, as forming <u>transparent clear</u> <u>liquids</u> into which the <u>benzophenone</u> member of the Markush group of claim 13 can be

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included (up to 1% by weight) as an <u>ultra violet light absorber</u>, (column 7, lines 37 to 70) for active ingredients to be applied to or contact the skin, hair, or any other part of the body (column 7, line 72 to column 8, line 14, (no explicit mention of peroxide, or tooth bleach oxidizing whiteners).

Kibbel et al U.S. 5,149,463 (9/92) describes Carpopol thickened and claims up to 50% hydrogen peroxide laundry bleach (non –carbopol thickened) meeting the term of claims 1, 4, 5, 7 to 9; be excludes the carbopol (carboxypolymethylene gel) of claim 3.

Montgomery (I-II) U.S. 5,908,614 (6/99) and 5,922,307 (7/99) are <u>prior art</u> as to this Montgomery et al application and unquestionably describes a <u>gel of carboxypolymethylene</u> tooth whitening composition (<u>inherently transparent</u>) and encompassed species of oxidizing peroxide, percoxyacid/or precursor (<u>inherently transparent</u>), meeting claims 1, 3, 4, 5, 7 to 9 as does Murayama (I-II), and Pellico, <u>also</u>.

Montgomery (II) describes encompassed tooth whitening compositions.

Montgomery (I) may be <u>a dry solid</u> but no claim recites that these compositions are non-solid <u>liquid or gel</u>. See: page 14 line 17 "<u>solid</u>".

Applicants' counsel has been supplied with evidence of transparency of the prior art compositions comprised of "Carbopol" carboxypolymethylene gel and peroxide.

The Courts have held that there is no requirement that those of ordinary skill in the art knew of the inherent property. See MPEP 213.01(d) and MPEP § 2112-§ 2113 for case law on inherency. Also note that the critical date of extrinsic evidence showing a universal fact need not antedate the filing date. See MPEP § 2124.<

Atlas Powder Co. V. IRECO, 51 USPQ2d 1943 (Fed. Cir. 1999)

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"Artisans of ordinary skill may not recognize the inherent characteristics or functioning of the prior art. . . However, the discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer. " the Court further held that "this same reasoning holds true when it is not a property but an ingredient which is inherently contained in the prior art".

Mehl/Biophile International Corp. V. Milgraum, 52 USPQ 2d 1303 (Fed. Cir. 1999)

Thus viewed as a whole, the Polla disclosure shows that the "natural result flowing from the operation as taught would result in alignment of the laser light over the hair follicle, as claimed." This was true even thought Polla did not mention the goal of hair removal. Therefore, the Court held that the `192 patent was invalid as anticipated.

Where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may be an inherent characteristic of the prior art, it has the authority to require the applicant to prove that the subject matter shown in the prior art does not possess the characteristics relied on. In re Schreiber, 44 USPQ2d 1429 (Fed. Cir. 1997).

Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada 15 USPQ2d 1655, 1658 (Fed. Cir 1990). See MPEP 2112.01.

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From the teaching of the references, it was apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore the invention as a whole was prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shep Rose whose telephone number is (703) 308-4609. The examiner can normally be reached on Monday, Tuesday and Thursday from 7:30 AM to 6 PM.